



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/571,982	03/15/2006	Jean-Marc Yerly	YERJ-3	5611

7590 04/09/2007  
Clifford W Browning  
Krieg Devault LLP  
One Indiana Square Suite 2800  
Indianapolis, IN 46204-2079

EXAMINER
----------

BRAHAN, THOMAS J

ART UNIT	PAPER NUMBER
----------	--------------

3654

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/09/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	Application No. 10/571,982	Applicant(s) YERLY, JEAN-MARC	
	Examiner Thomas J. Brahan	Art Unit 3654	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 3/15/2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>3/15/6 7/24/6 10/2/6</u> | 6) <input type="checkbox"/> Other: _____  |

1. The drawings are objected to under 37 C.F.R. § 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the articulations for the folding support arms of claim 8 must be shown, or the feature must be canceled from the claims. As no new matter may be entered, the articulation should be shown schematically with a labeled box added to drawing figure 5.

2. If corrected drawing sheets are submitted to overcome the above objection, they must be in compliance with 37 CFR 1.121(d) and are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended". If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d).

3. If the changes are not accepted by the examiner, because for example introducing new matter, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

4. The following is a quotation of the second paragraph of 35 U.S.C. § 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which applicant regards as his invention.

5. Claims 1-18 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. For example:

- In claim 1, line 7, the term "said retaining line" lacks antecedent basis within the claim. Is this the jib holding line of the previous line or another line?
- In claim 1, line 8, the limitation "made to follow a guiding track" fails to positively include the track as a claimed element of the invention. The limitation only recites a function or quality of the counterweight. The term "guiding track" lacks antecedent basis throughout the claims.
- In claim 1, lines 8 and 9, the limitation "made to follow a guiding track with a variable slope" is inaccurate. The track has a "varying" slope not a "variable" slope.

Art Unit: 3654

- In claim 1, line 10, the term "the variations in slope" lacks antecedent basis within the claim.
- Claim 1 is also indefinite, as the limitation "the variations in slope are chosen so...." is drawn to a method step in the designing of the apparatus, not to the structure of the apparatus. Claim 9 has a similar recitation.
- Claim 4 is indefinite as the term "sigmoidal" can be interpreted in two manners as it reciting C-shaped rails or S-shaped rails, see <http://www.m-w.com/cgi-bin/dictionary?book=Dictionary&va=sigmoidal>.
- In claim 7, the term "said support elements" lacks antecedent basis within the claims.
- In claim 9, the term "the variations in slope" lacks antecedent basis within the claims.
- In claim 14, the terms "the first cable" and "the second cable" lack antecedent basis within the claims.

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-5, as best understood, are rejected under 35 U.S.C. § 102(b) as being anticipated by Brown. Brown shows a machine for lifting and handling loads with an orientable articulated placing jib, comprising a mast (15) with a rotating pivot (16), an articulated jib (18/20) comprising a jib foot (18), articulated at its first end on the top of the mast by means of a horizontal rotation shaft (19), a jib head member (20) articulated for rotation by means of a horizontal articulation shaft (21) on the second end of the jib foot, a jib holding assembly comprising at least one stanchion (17), a jib holding line (100) and a moving counterweight (35) connected to the jib by the said retaining line (100), wherein the counterweight (35) is made to follow a guiding track (44) with a varying slope, rigidly secured to the rotating pivot (16), supporting the said counterweight, arranged opposite the jib, and where the variations in slope are chosen so that the counterweight exerts a set of variable forces on the said jib and on the structure of the said machine, contributing to balancing the machine during movements of deployment/retraction of the jib in articulated working mode.

A portion of the track adjacent the mast has less slope than a portion away from the track, as

Art Unit: 3654

recited in claim 2. The track is a pair of curved rails, as recited in claims 3 and 5. The rails are C-shaped as to be sigmoidal, see <http://www.m-w.com/cgi-bin/dictionary?book=Dictionary&va=sigmoidal>, as recited in claim 4.

9. Claim 9, as best understood, is rejected under 35 U.S.C. § 103(a) as being unpatentable over Brown in view of EP 1 057 776. Brown shows the basic claimed crane structure, as detailed above. It has the crane used in an articulated mode (a level luffing mode) and a luffing mode (a conventional mode), see column 4, lines 32-45, but varies from claim 9 by not having the jib head and jib foot moving to an aligned arrangement in the luffing/conventional mode. EP '776 shows a similar jib head (44) and jib foot (34) which moves from an articulated mode to a luffing mode, see figures 4a-4d, with the jib head used as an aligned extension of the jib foot. It would have been obvious to one of ordinary skill in the art at the time the invention was made by applicant to modify the jib of Brown by forming the jib head member and the jib foot with conjugate shapes, as to have the jib head as an aligned extension during the luffing conventional mode, as taught by EP '776.

10. Claim 10-14, as best understood, is rejected under 35 U.S.C. § 103(a) as being unpatentable over Brown in view of EP '776. Brown shows the basic claimed crane structure, as detailed above, but varies from the claims by not having a system of opposing cables for positioning the jib head. EP '776 shows a similar articulated jib head with a second positioning cable (51), see figure 3. It would have been obvious to one of ordinary skill in the art at the time the invention was made by applicant to provide the jib head of Brown with a second rope, for positively moving the jib head to the lowered position, as taught by as taught by EP '776. The location of the attachment point, as recited in claim 14, would have been an obvious design expedient with the level of ordinary skill in the art at the time the invention was made by applicant.

11. Claim 10-14, as best understood, is rejected under 35 U.S.C. § 103(a) as being unpatentable over Brown in view of Pollack. Brown shows the basic claimed crane structure, as detailed above, but varies from the claims by not having a system of opposing cables for positioning the jib head. Pollack shows a similar articulated jib head with first and second opposed guy cables (40 and 60), for automatically adjusting the jib head as the jib foot is rotated to maintain a level jib foot. It would have been obvious to one of ordinary skill in the art at the time the invention was made by applicant to provide the jib head of Brown with a pair of opposed guy cables, for maintaining a horizontal of the jib head during articulation, as taught by Pollack.


Art Unit: 3654

12. Claims 6, 7 (if rewritten to depend from claim 6), 8, 15 and 16 would be allowable if rewritten to overcome the rejections under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and if rewritten to include all of the limitations of the base claim and the intervening claims.

13. Claims 19 and 20, as best understood, are rejected under 35 U.S.C. § 103(a) as being unpatentable over Brown in view of Mathias. Brown shows the basic claimed crane structure, as detailed above, but varies from the claims by not having a gear drive for the jib head articulation. Mathias shows an articulated boom with gear drives at the joints. It would have been obvious to one of ordinary skill in the art at the time the invention was made by applicant to provide the jib head articulation of Brown with a gear drive, for positively moving the jib head to the lowered position, as taught by as taught Mathias. Note as the base reference of Brown uses electric motors, such as electric motor (32), it would have been obvious to use an electric motor as the actuation for the added gear drive at the jib articulation.

14. Toomey is cited as showing a similar crane with S-shaped counterweight rail portions. Applicant's Prior Art statement listed references which were not submitted. These have crossed out on the returned forms as they were not considered.

15. An inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas J. Brahan whose telephone number is (571) 272-6921. The examiner's supervisor, Mr. Gene Crawford, can be reached at (571) 272-6911. The fax number for all patent applications is (571) 273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Questions regarding access to the Private PAIR system, should be directed to the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Thomas J. Brahan  
Primary Examiner  
Art Unit 3654